ABSTRACT

A lapping machine operable with a lap wheel for lapping gold jewelry and adapted to collect gold dust produced by the lapping machine, includes: (a) a base, (b) an electric motor mounted to the base, the electric motor having a rotatable output shaft extending upward and adapted to be coupled to the lap wheel which is situated above the electric motor and rotates about the axis of the output shaft, with a gold dust debris space defined as the area surrounding the lap wheel and extending from below the lap wheel downward and surrounding at least part of the output shaft, (c) a shroud comprising rear and opposite side parts that surround the rear and opposite sides of the gold dust debris space respectively, thus leaving the front of the gold dust debris space open and accessible, the shroud including a continuous front wall and a continuous rear wall spaced radially outward of the front wall, with air flow passages defined between the front and rear walls of the rear and side parts, the front walls of the side and rear parts of the shroud having a plurality of apertures which comprise a majority of the surface area thereof, (d) a first air exhaust port in the rear wall of the rear part of the shroud at an elevation below the bottom of the lap wheel, the air flow passages in the side parts of the shroud communicating with the air flow passage in the rear part and with the first air exhaust port, and (e) exhaust air suction means communicating with the first air exhaust port for drawing air and gold dust from the gold dust debris area.